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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,299	07/26/2006	Zhikai Wang	2006_1023A	9015
513 7590 05/17/2010 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503				
EXAMINER LEONARD, MICHAEL L.				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 05/17/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com
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Office Action Summary

Application No.

10/584,299

Applicant(s)

WANG ET AL.

Examiner

MICHAEL LEONARD

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The rejection based on U.S. Patent No. 7,368,171 to Bushendorf et al. is withdrawn.

Claim Objections

Claims 2-16 are objected to because of the following informalities: The applicants' proposed an amendment to the specification to better define formula 1A, which was discussed in interview dated 08/12/2009. The applicants' failed to amend instant claim 2 to correspond to the newly amended specification. To expedite prosecution the examiner will examine the claims as if formula 1A was amended in the same manner as the specification. The examiner asks the applicants' to amend the claims to be commensurate with the amended specification (03/18/2010). Appropriate correction is required.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification as originally filed fails to provide support for the subject matter claimed in claim 2.

Claim Rejections - 35 USC § 102/103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-6, 11-13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent Pub. No. 2002/0099110 to Norlin et al. for the reasons set forth in the last Office action.

Claims 2-6 and 9-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 7,189,781 to Acevedo et al. for the reasons set forth in the last Office action.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as obvious over U.S. Patent Pub. No. 2002/0099110 to Norlin et al.

Amended Claims 7-8:

As to newly amended claims 7-8, the examiner would like to point the applicants' to the Norlin reference that discloses wherein the backbones of the oligomers are derived from multiple polyols including acrylic polyols and polyolefin polyols, such as hydrogenated polybutadiene polyols (0012-0013, and 0022) and they are linked by variety of urethane linkages (0013). Norlin further discloses that the radiation curable oligomer has terminal ethylenically unsaturated groups derived from hydroxy-containing methacrylates (0011) and that the radiation curable oligomer is prepared by reacting at least polyol, with at least one polyisocyanate and at least one hydroxy-containing

methacrylate in accordance with procedures and in proportions known for producing such products.

Therefore at the time of the invention it would have been obvious to a person of ordinary skill in the art from the teachings of Norlin to react a mixture of polyols with polyisocyanates to form a prepolymer that is subsequently reacted with hydroxy-containing methacrylates to form unsaturated terminal urethane oligomers as evidenced by Norlin (0029). The applicants' invention can be arrived at solely by selecting from the various choices disclosed by the reference. The various choices and reaction conditions are set out in the reference as workable and hence no skill in the art is required.

Response to Arguments

Applicant's arguments filed 03/18/2010 have been fully considered but they are not persuasive. Applicants argue that the claimed invention has not been rendered anticipated or obvious by Norlin et al. ('9110) 1 reason.

1) The reason being that the Norlin reference fails to disclose the use of an acrylic polyol.

In response to issue 1), the Norlin reference discloses wherein the backbones of the oligomers are derived from multiple polyols including acrylic polyols and polyolefin polyols, such as hydrogenated polybutadiene polyols (0012-0013, and 0022) and they are linked by variety of urethane linkages (0013). Therefore, it is clear from the disclosure of Norlin that acrylic polyols can be used in combination with other

polyols including rubber-based polyols to produce a urethane oligomer with multiple polyol backbones.

Applicants argue that the claimed invention has not been rendered anticipated or obvious by Acevedo et al. ('781) 1 reason.

1) The reason being that the Acevedo reference fails to disclose the use of an acrylic polyol.

In response to issue 1), the Acevedo reference discloses wherein the backbones of the polyurethane prepolymer can be derived from multiple polyols including acrylic polyols and polyolefin polyols, such as hydrogentated polybutadiene polyols (Column 6, lines 17-26) and they are linked by variety of urethane linkages (0013). Therefore, it is clear from the disclosure of Norlin that acrylic polyols can be used in combination with other polyols including rubber-based polyols to produce a urethane oligomer with multiple polyol backbones.

In conclusion, while the applicants' allege that the references to Norlin and Acevedo fail to disclose the use of acrylic polyols. However, both references disclose combination of polyols including acrylic polyols and rubber-based polyols and therefore because the various choices and reaction conditions are set out in the reference as workable and hence no skill in the art is required.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LEONARD whose telephone number is (571)270-7450. The examiner can normally be reached on Mon-Fri 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 1796

/MICHAEL LEONARD/
Examiner, Art Unit 1796